Transportation & Distribution Information Systems (TDIS)

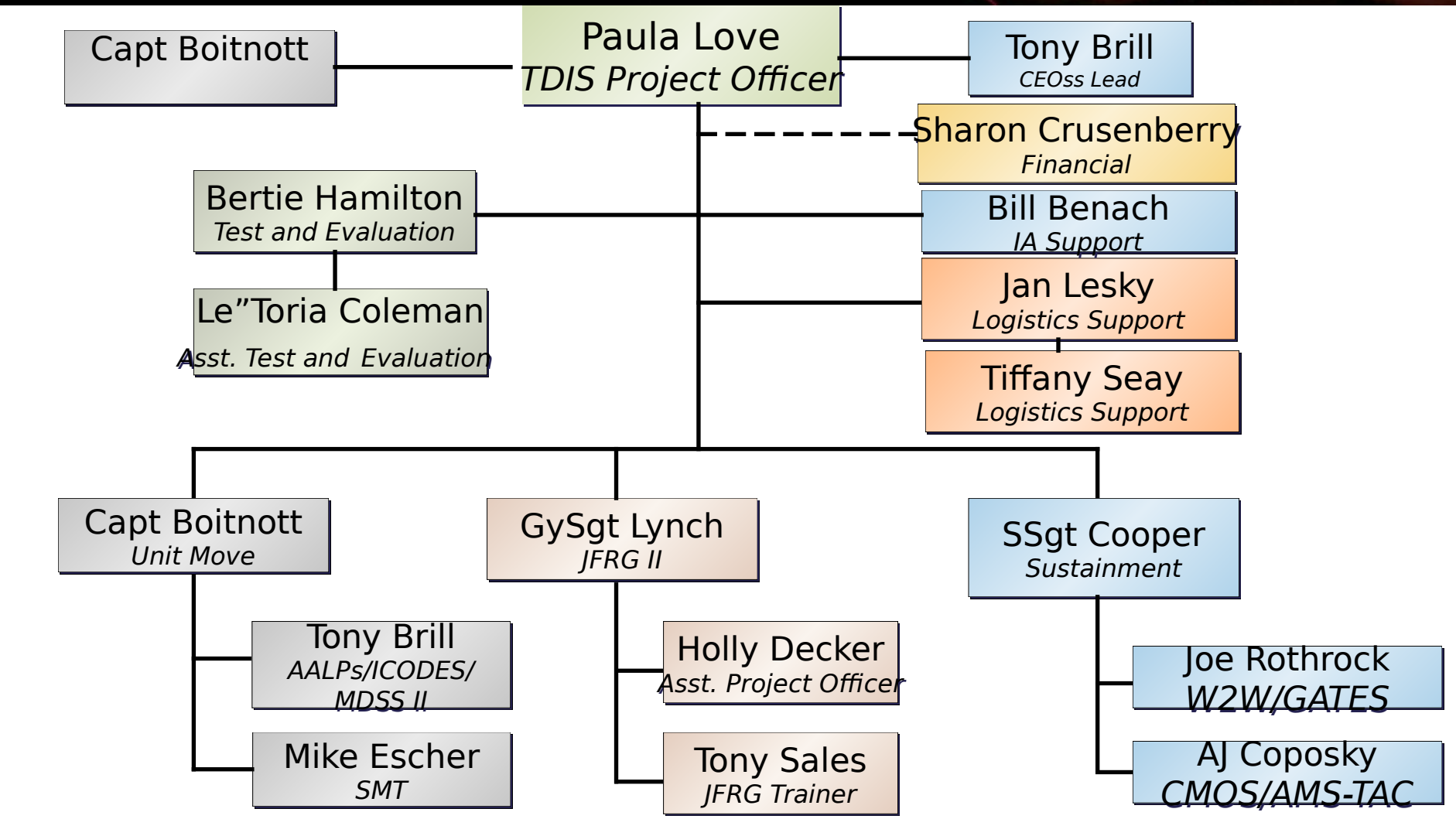
Joseph W. Rothrock
(703) 432-5121, DSN 378-5121
FAX (703) 432-5184

Mission

To develop, provide, and maintain integrated logistics systems that improve transportation, FDP&E, AIT, and distribution services to the Warfighter in a deployed and garrison environment, enhancing their war fighting capability.

MARINE CORPS SYSTEMS COMMAND

UNITED STATES MARINE CORPS



TDIS Applications

- **AMS-TAC – Automated Manifest System - Tactical**
- **CMOS – Cargo Movement Operations System**
- **W2W – Warehouse to War fighter**
- **Future Plans include integration of life cycle management responsibilities for:**
  - **TOPS, AGTR, GATES, Power track, GFM**
    - **Manpower and Funding Resources**

AMS-TAC

AMS-TAC Current

- Fielded version 3.0.7
- Testing complete for version 3.1
  - SSAA/IA documentation in process
  - NMCI Certification pending resolution of challenges
    - Peer-to Peer or mapping is in violation of NMCI business rules
    - Using Unit budget for appropriate NMCI Seat assignment
    - Establishing seat assignments

AMS-TAC

AMS-TAC Future

- Alternatives
  - Web-enable in concert with client version (Navy/USMC venture)
  - Integration with W2W
  - Integration into CMOS
    - Capabilities Based Assessment Team (CBAT) vision
    - More Users MLG
    - Functionality tradeoffs btw Services

CMOS

- 7.0 in IA certification process
- 7.1 certification will start upon completion of 7.0 upgrade
- Everyone should be writing RFID Tags out of CMOS for Iraq Shipments (IAW Policy)
- Working keyboard readers vice scanners
- Working 2d Barcode for 1348's
- Training 5-9 Jun, ANG, Harrisburg, PA.
  - Aug class unfunded
  - AIT Lab setup possible for mid term solution
- SPI Refresh, 55 Desk 18 Laptops
- Web-enable, USTC CBAT initiative
- D-CMOS
  - Any issues ?

LTMITV-W2W

Last Tactical Mile In-Transit Visibility

Warehouse to

W2W Background

- I MEF creation
  - Late Summer 2003 - SYTEX (Prime Vendor/Systems integrator)
  - Deployed to Iraq
- II MEF transitioned deployment and refined W2W material solution and business process
- MARCORSYSCOM assumed program management responsibilities in Aug 05

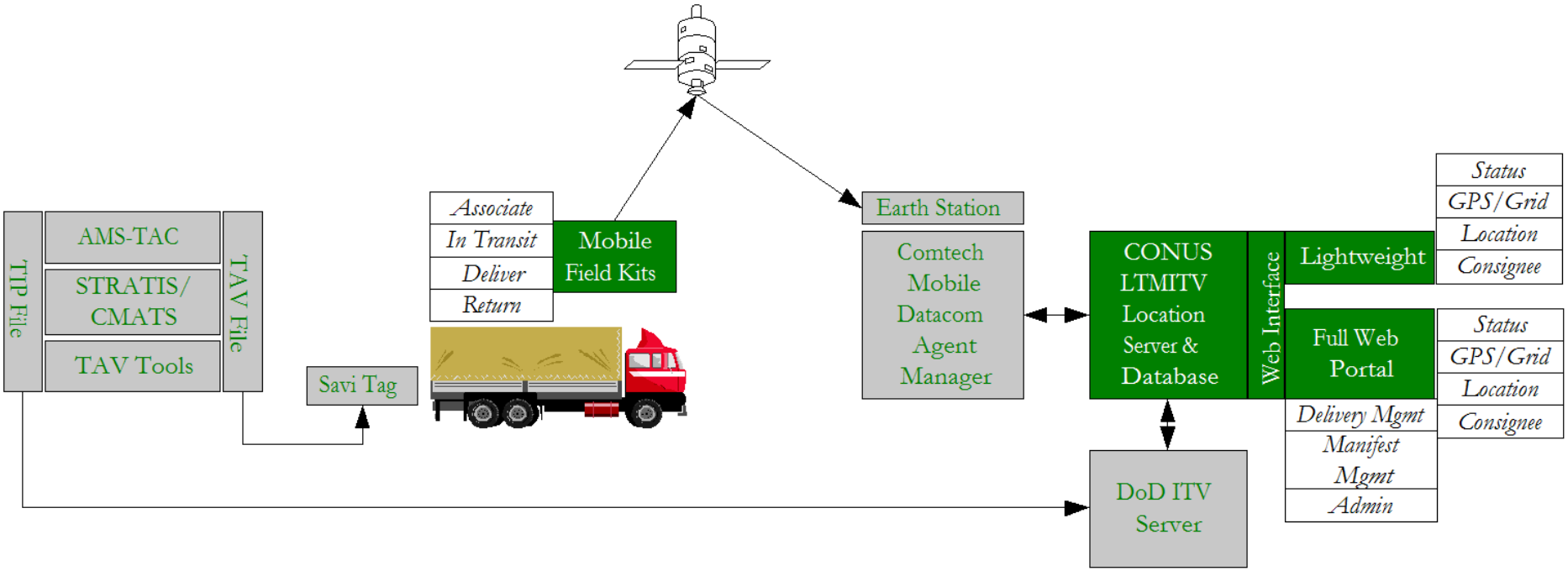
W2W

- Last-Mile’ visibility of supplies forward
- Non-nodal location updates.
  - Not dependent on nodal interrogators
- Electronic capture of consignee data at delivery point
- Automated generation of AS1/AS2 transactions

MARINE CORPS SYSTEMS COMMAND

UNITED STATES MARINE CORPS

W2W



W2W Principle Items

- Server
- Mobile Kit
  - Computer (Laptop/tablet)
  - Transceiver
  - Cable Assembly
  - Power Supply

No difference btw Base Unit Kit or Mobile Kit just how it is emplo

W2W Functional Overview

- Server
  - Receives and parses TIP files or content level detail from ITV
  - From Base Unit Kit or Mobile Kit
    - Receives location (GPS) updates
    - Receives camp drop, RUC pickup and RUC delivery data
  - Provides rich query and lightweight query alternatives via web interface
  - Sends AS1 and AS2 80 card column courier file updates to USMC server for consumption based on in-garrison and theatre business rules

W2W Functional Overview

- Base Unit Kit or Mobile Unit Kit
  - Computer with Visibility Tracking Program (VTP)
  - At delivery preparation – input of PDC, AAC and Tag ID
  - At Camp Drop, RUC Pickups and End RUC Deliveries
    - Mobile Unit Kit – GPS updates and input of Tag ID and Consignee data
    - Base Unit Kit – input of Tag ID and Consignee data

- Visibility Tracking Program
- Software application that runs on Tablet PC, which is part of a Field Kit
  - A few touch screen, most pen-based
  - Pen-based provide brighter screens
  - Includes graphic keyboard pop-up to allow entry of name/textual data via keyboard
  - Pen-based also provides additional means of handwriting recognition for input

MARINE CORPS SYSTEMS COMMAND

UNITED STATES MARINE CORPS

W2W

W2W

- Correlates delivery manifest data and Tag IDs with a field kit that is placed within a delivery/convoy vehicle
- Provides a means to query the location and current status of materiel pushed from SMU/TMO forward via a web enabled interface
- Can be configured 2 ways:
  - Mobile unit on each supply convoy from warehouse
    - Direct RUC delivery – AS2 (D6T)
    - Intermediate camp drop – AS1
  - Fixed system at each camp
    - Capture subsequent RUC pickup from camp – AS2 (D6T)

W2W

- Relies on satellite transceiver and GPS to communicate data to Location Server
  - Designed to use minimal bandwidth
  - Same transceivers as MTS and BFT
  - Provides robust seamless satellite data communications to ensure data that is sent up is not ‘lost in the ether’
  - All communications between Field Kit and Satellite are encrypted
- Does not depend on a localized server
- Laptop does not use mapping software– it is purely an input/filter for data up to the Location Server

MARINE CORPS SYSTEMS COMMAND

UNITED STATES MARINE CORPS

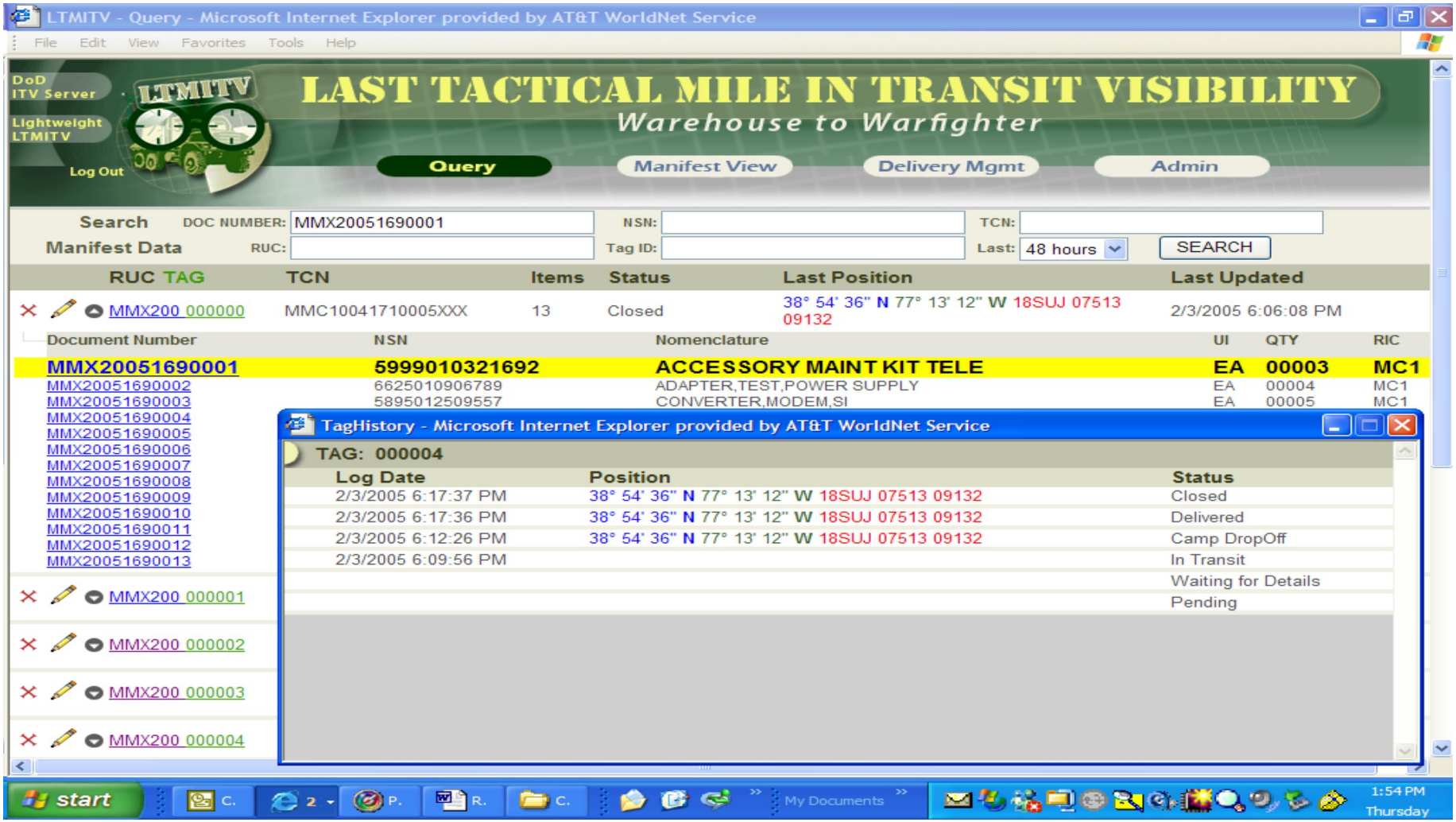
W2W

LTMITV
LAST TACTICAL MILE IN TRANSIT VISIBILITY
Warehouse to Warfighter
Log In
Username:
Password:
Login
I meant to go to the DoD ITV web site
I am a Using Unit with low bandwidth but would like to query LTMITV

MARINE CORPS SYSTEMS COMMAND

UNITED STATES MARINE CORPS

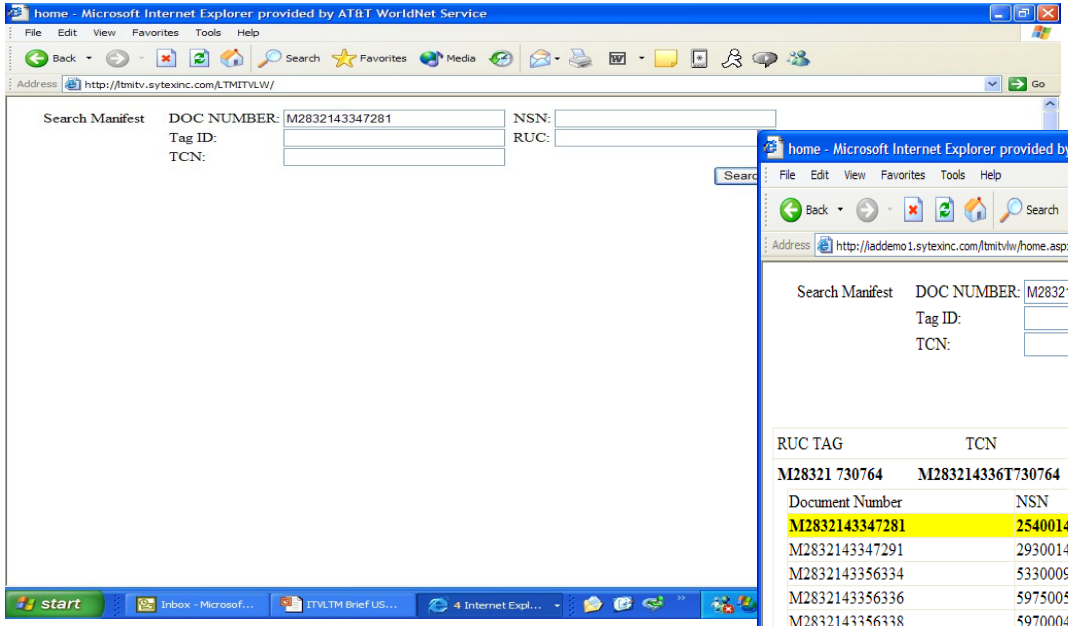
W2W

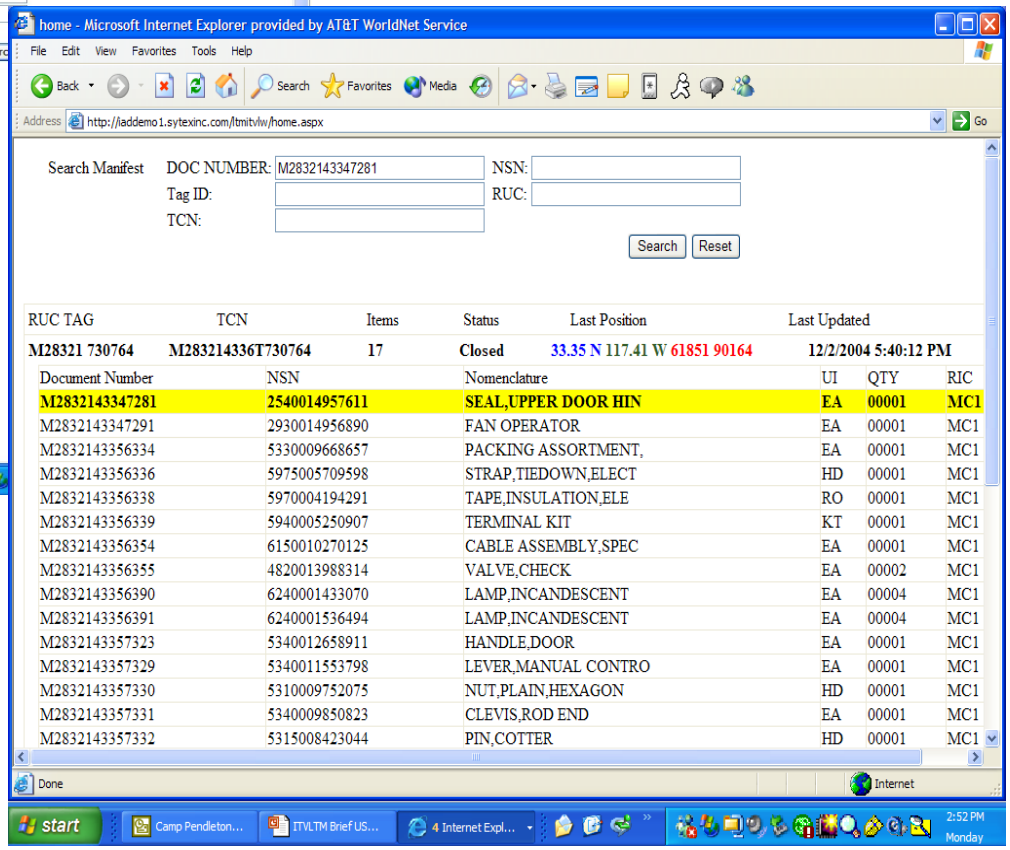


MARINE CORPS SYSTEMS COMMAND

UNITED STATES MARINE CORPS

W2W



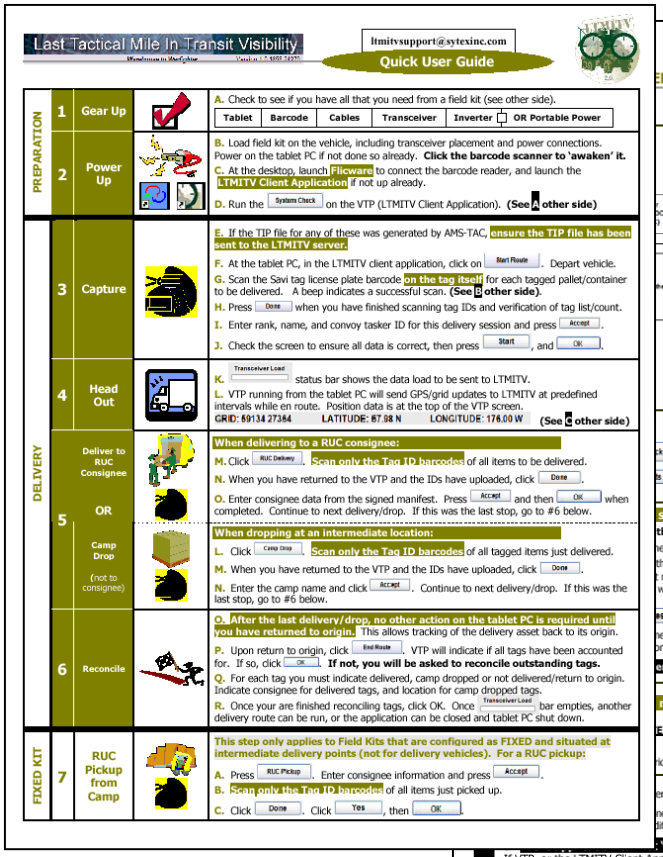

home - Microsoft Internet Explorer provided by AT&T WorldNet Service
File Edit View Favorites Tools Help
Back Search Favorites Media
Address http://laddemo1.sytexinc.com/ltmitvlw/home.aspx
Go
Search Manifest
DOC NUMBER: M2832143347281
Tag ID:
TCN:
NSN:
RUC:
Search
Reset
RUC TAG TCN Items Status Last Position Last Updated
M28321 730764 M283214336T730764 17 Closed 33.35 N 117.41 W 61851 90164 12/2/2004 5:40:12 PM
Document Number NSN Nomenclature UI QTY RIC
M2832143347281 2540014957611 SEAL,UPPER DOOR HIN EA 00001 MC1
M2832143347291 2930014956890 FAN OPERATOR EA 00001 MC1
M2832143356334 5330009668657 PACKING ASSORTMENT, EA 00001 MC1
M2832143356336 5975005709598 STRAP,TIEDOWN,ELECT HD 00001 MC1
M2832143356338 5970004194291 TAPE,INSULATION,ELE RO 00001 MC1
M2832143356339 5940005250907 TERMINAL KIT KT 00001 MC1
M2832143356354 6150010270125 CABLE ASSEMBLY,SPEC EA 00001 MC1
M2832143356355 4820013988314 VALVE,CHECK EA 00002 MC1
M2832143356390 6240001433070 LAMP,INCANDESCENT EA 00004 MC1
M2832143356391 6240001536494 LAMP,INCANDESCENT EA 00004 MC1
M2832143357323 5340012658911 HANDLE,DOOR EA 00001 MC1
M2832143357329 5340011553798 LEVER,MANUAL CONTRO EA 00001 MC1
M2832143357330 5310009752075 NUT,PLAIN,HEXAGON HD 00001 MC1
M2832143357331 5340009850823 CLEVIS,ROD END EA 00001 MC1
M2832143357332 5315008423044 PIN,COTTER HD 00001 MC1
Done
Internet
start
Camp Pendleton...
ITVLTM Brief US...
4 Internet Expl...
2:52 PM
Monday

Lightweight Query

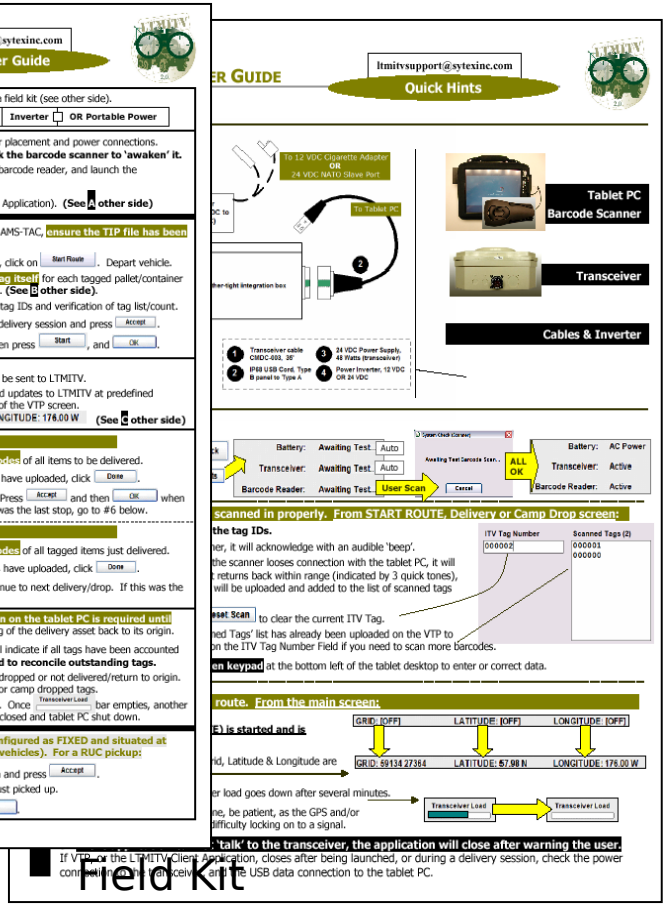
MARINE CORPS SYSTEMS COMMAND

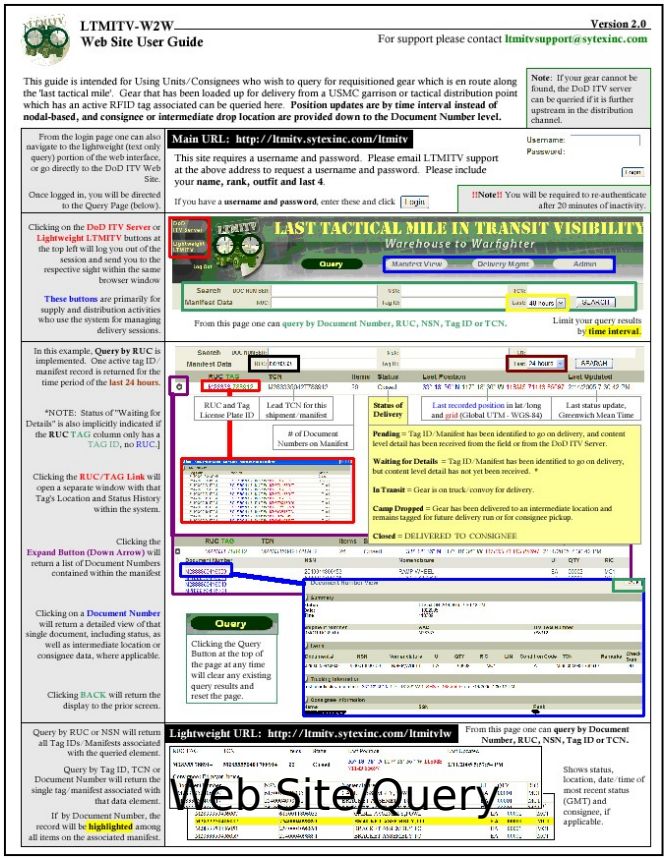
UNITED STATES MARINE CORPS

Quick User Guides


Last Tactical Mile In Transit Visibility
ltmitvsupport@sytexinc.com
Quick User Guide
PREPARATION
1 Gear Up
A. Check to see if you have all that you need from a field kit (see other side).
Tablet | Barcode | Cables | Transceiver | Inverter | OR Portable Power
2 Power Up
B. Load field kit on the vehicle, including transceiver placement and power connections.
C. At the desktop, launch Flicwave to connect the barcode reader, and launch the LTMITV Client Application if not up already.
D. Run the System Check on the VTP (LTMITV Client Application). (See other side)
DELIVERY
3 Capture
E. If the TIP file for any of these was generated by AMS-TAC, ensure the TIP file has been sent to the LTMITV server.
F. At the tablet PC, in the LTMITV client application, click on Start Route. Depart vehicle.
G. Scan the Savi tag license plate barcode on the tag itself for each tagged pallet/container to be delivered. A beep indicates a successful scan. (See other side).
H. Press Done when you have finished scanning tag IDs and verification of tag list/count.
I. Enter rank, name, and convoy tasker ID for this delivery session and press Accept.
J. Check the screen to ensure all data is correct, then press Start, and OK.
4 Head Out
K. Transceiver Load status bar shows the data load to be sent to LTMITV.
L. VTP running from the tablet PC will send GPS/grid updates to LTMITV at predefined intervals while en route. Position data is at the top of the VTP screen.
GRID: 59134 27364 LATITUDE: 67.98 N LONGITUDE: 176.00 W (See other side)
5 Deliver to RUC Consignee
When delivering to a RUC consignee:
M. Click RUC Delivery. Scan only the Tag ID barcodes of all items to be delivered.
N. When you have returned to the VTP and the IDs have uploaded, click Done.
O. Enter consignee data from the signed manifest. Press Accept and then OK when completed. Continue to next delivery/drop. If this was the last stop, go to #6 below.
OR
Camp Drop (not to consignee)
When dropping at an intermediate location:
L. Click Camp Drop. Scan only the Tag ID barcodes of all tagged items just delivered.
M. When you have returned to the VTP and the IDs have uploaded, click Done.
N. Enter the camp name and click Accept. Continue to next delivery/drop. If this was the last stop, go to #6 below.
6 Reconcile
O. After the last delivery/drop, no other action on the tablet PC is required until you have returned to origin. This allows tracking of the delivery asset back to its origin.
P. Upon return to origin, click End Route. VTP will indicate if all tags have been accounted for. If so, click OK. If not, you will be asked to reconcile outstanding tags.
Q. For each tag you must indicate delivered, camp dropped or not delivered/return to origin. Indicate consignee for delivered tags, and location for camp dropped tags.
R. Once your are finished reconciling tags, click OK. Once Transceiver Load bar empties, another delivery route can be run, or the application can be closed and tablet PC shut down.
FIXED KIT
7 RUC Pickup from Camp
This step only applies to Field Kits that are configured as FIXED and situated at intermediate delivery points (not for delivery vehicles). For a RUC pickup:
A. Press RUC Pickup. Enter consignee information and press Accept.
B. Scan only the Tag ID barcodes of all items just picked up.
C. Click Done. Click Yes, then OK.

Field Kit





Web Site/Query

Next Steps

- Continue to assess operational use
- Continue in-theatre fielding and assessment
- Field Kits to all 3 MEF’s for Training Base
- Determine additional requirements
- Conduct Requirements Board for seamless distribution process (AMS/W2W ?)
- Future minor releases
- Passive RFID options
- Smaller footprint (Handheld)
- Converge with other SatCom providers
- MCEITS, IA Process

What it all Means

- Visibility from Warehouse to Warfighter
- Robust COTS platform
- Simplified approach
  - Uses pre-positioned data
  - Economic use of bandwidth
- Not intended as another stovepipe
- Reusable platform to solve real problems right now…
- …while recognizing that change is inevitable with:
  - Increased use and feedback
  - Technology trends and adoption
  - Standards, policy and directive evolution

Questi

Transportation and Distribution Information Systems (TDIS) Program Office

Thank You!